Jenks (E. W.)

Perineo-Vaginal Restoration

BY

EDWARD W. JENKS, M.D., LL.D.
Professor of Gynecology, Michigan College of Medicine and Surgery; Fellow of the American Gynecological Society; Fellow of the Obstetrical Society of London, etc., etc.
Detroit, Mich.

REPRINTED FROM

THE AMERICAN JOURNAL OF OBSTETRICS
Vol. XXVIII., No. 5, 1893

NEW YORK
WILLIAM WOOD & COMPANY, PUBLISHERS
1893

SURGEON GEN'L'S OFFICE
507
LIBRARY

PERINEO-VAGINAL RESTORATION.[1]

I PURPOSE presenting under the above title a paper in which are briefly considered some of the frequent injuries to the perineum and lower portion of the vagina in childbirth, and a surgical procedure for restoring them to an approximately normal condition.

In 1877 I read a paper before the Michigan State Medical Society in which were mentioned "some new procedures in the operation for laceration of the perineum," and on January 8th, 1879, I read a paper before the Cincinnati Obstetrical Society, which was published in THE AMERICAN JOURNAL OF OBSTETRICS for April, 1879, describing the same procedure as in the first-mentioned article, the latter being entitled "Perineorrhaphy and a Description of a New Mode of Operating." This paper advocated a new mode of submucous dissection of the tissues, or what is now designated flap-splitting.

This method of operating was favorably commented upon by the leading medical journals of the day, and the leading text books on gynecology published in this country continued for many years to sanction it. In that paper the cutting away of the flap instead of preserving it was advised. Subsequently I preserved the flap, and, believing for a time my mode of operating, as well as the preservation of the flap, was original, so stated when asked regarding it by some of my friends. But, learning that others had also described saving the flap, no claim has been made as to its originality with myself. The submucous dissection I described—or flap-splitting operation, as now designated—was made several hundreds of times by me in public clinics, as well as by many others who had adopted it, some years before the flap-splitting operation of Tait or others had become known.

[1] Read before the Section on Gynecology and Abdominal Surgery, Pan-American Medical Congress.

However, I am not strenuous in claiming priority in the mode of operating I described so long ago, as it is of little importance, for I am only one of the great multitude working in the field of gynecological surgery.

I am prompted to this historical fact as an introduction to this paper, as the surgical procedures which I set forth sixteen years ago are occasionally referred to at the present time; and a late edition of a well-known text book, that had previously commended it by means of lengthy quotations and illustrations, now dismisses it by a brief allusion as "too bloody."

Although repeatedly asked to write an additional paper, I have had other fields to cultivate, and what seemed more important in surgical matters to engross my time and attention; but of late there seems to have been a revival of interest in plastic gynecological surgery.

Description.—The operation I make to-day, and which is described in this brief paper, is, I believe, a great improvement on my former method. It would hardly be possible for one to make hundreds of operations of any kind without finding a chance for some improvement either in the mechanical portion or in results obtained.

There have been many surgical devices brought to the notice of the medical public under the general title of perineorrhaphy, but the merits or demerits of other operations than the one here described will not be considered.

It is not my purpose to discuss laceration of the perineum or the necessity for repair in detail. It is well known to every careful observer that rather extensive laceration of the perineum and vaginal walls occurs in childbirth from which no bad results follow. Again, it is equally well known that many discomforts and divers reflex symptoms often ensue from lacerations that at the time of their occurrence seem too insignificant to demand a passing thought or even a single suture.

The immediate or primary operation will not be discussed. It is to the consideration of secondary operations alone that your attention is called. I will state, as a general proposition, that operations are not demanded because of laceration *per se*, but when there are unmistakable discomforts that can be plainly traced to them, and health and comfort can only be recovered by restoring the torn parts to their normal relations.

The portion of the recto-vaginal septum commonly designated

the perineum supports the lower portion of the posterior vaginal wall, which in turn supports a corresponding part of the anterior vaginal wall. The lower portion of the rectum is sustained, and the proper performance of its functions aided, by the perineum as a whole, but particularly by the levator ani. Four muscles, the bulbo-cavernosus, the transversus perinei, the anterior portion of the levator ani, and the sphincter ani, are united in the perineum; and it is the severance of these from their fellows on the opposite side, together with the separation of the perineal fascia, which produces the mischief; therefore laceration of the perineum and a portion of the posterior vaginal wall, whether partial or complete, may cause a variety of conditions, such as loss of vulvar integrity and impairment of the functions of the rectum; partial or complete incontinence of the rectum and bladder; increased and irritating secretions of the vagina and rectum, and recurring prolapse of the rectum after operation for prolapsus recti; descent of the recto-vaginal septum, or rectocele; a similar condition of the anterior vaginal wall and bladder, or cystocele.

It is now a long time since attention was called to the prominence which the levator ani muscle occupies among the others of the pelvic outlet. Nevertheless the functions and importance of this muscle have not been sufficiently considered by the majority of either writers or operators. Therefore they have not always appreciated how large a part it plays in producing the above pathological conditions.

Dr. Robert L. Dickinson,[1] in his article "Studies of the Levator Ani," has given a very full and admirable description of the relations, functions, and strength of this muscle, with illustrations and diagrams.

I have seen quite a number of patients that had been operated upon, with the result of having, to all external appearances, a perfect perineum, but with a rectocele above the line of the dissection or flap-splitting, that formed an excellent pocket for the accumulation of uterine and vaginal secretions in which the neck of the prolapsed uterus was constantly macerating. In many of the cases where only a portion of the redundancy is remedied, the only benefit seems to be to provide a better support for some form of pessary to sustain the uterus and vaginal walls.

[1] Prize essay, AMERICAN JOURNAL OF OBSTETRICS, September, 1889.

My own observation and experience, which I presume agrees with others, is that there are, at least in a general sense, four important ends to be attained in repairing the class of injuries under consideration: 1. To restore the loss of power and function to the lower portion of the rectum and vagina. 2. To restore the normal sustaining quality of the posterior vaginal wall for the anterior vaginal wall and bladder. 3. To provide as much support for the uterus as the perineum naturally gives. 4. To cure the many distressing nervous accompaniments.

Any surgical procedure which does not obtain relief to a great degree is not, in a strict sense, successful.

A perineum may be operated upon and, as far as external ap-

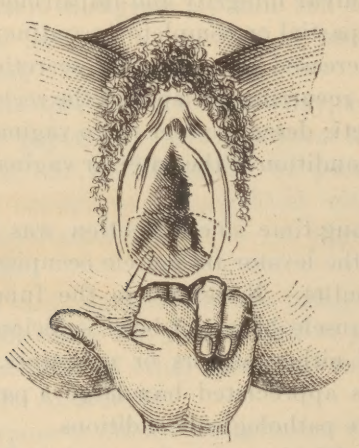

FIG. 1.

pearances are concerned, be a success; but if above the point of dissection there still remains a redundancy of the vaginal walls, or the restoration is not sufficient to support the anterior vaginal wall, the operation is but partially efficient. This is true whether the uterus is held up to the health line or not. There are so many cases operating to produce uterine displacement that it is not, as a general rule, just to gauge the success of an operation by the measure of uterine support it secures. For the reason that these partial operations are often insufficient, and are not followed by the anticipated beneficial results, I have chosen to designate the surgical procedure I have been making for a number of years perineo-vaginal restoration. To accomplish the best permanent results it is essential that dissection of

the flap extend as high within the recto-vaginal septum as there are signs of slack or redundancy of the posterior wall.

My mode of procedure is as follows: I first nick with the scissors each labium to mark either termination of the anterior margin of the flap, and then, having introduced two fingers into the rectum, and assistants making the parts taut, I insert the sharp-pointed scissors near the juncture of the integument and mucous membrane in the median line, or sometimes on one of the nicked lips, and proceed to dissect a flap up the septum as far as redundancy of the walls can be observed (Fig. 1).

It is important, for the sake of making a more rapid and neat operation, that the dissection be made in its entirety without withdrawing the scissors. When I first described my mode of operating in 1877 my friend the late Dr. Albert H. Smith de-

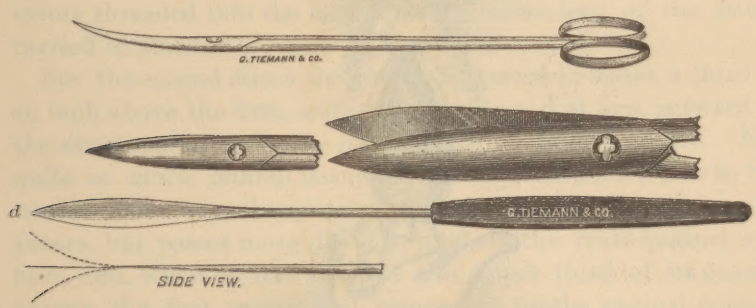

FIG. 2.

vised a knife to take the place of scissors, and subsequently I caused a knife to be made larger and more flexible than his (Fig. 2, *d*).

The scissors which I have used for the past six years are slightly curved, with blades completely overlapping each other, and both inner and outer edges ground equally sharp. I have found this form of blade is less liable to become entangled in submucous dissections than the ordinary-shaped blade (see Fig. 2).

These scissors can be used alternately in their proper capacity or with blades closed as a knife to dissect the flap more perfectly, as their sharpened outer edges and points render this an easy task; and there is a great advantage in their use in cases where there is tendency to bleed, as there is less hemorrhage than with an ordinary knife.

One objection recently made to this operation is that it is bloody, and sometimes one or more arteries have to be tied.

In the event of arteries being severed, compression with hot sponge or twisting will usually suffice; but if ligation is required, catgut is preferable if the ligatures are buried.

In many hundreds of operations I have not been compelled to ligate vessels, all told, more than six times.

The next important step in the operation, after the dissection of the flap, is the insertion and adjustment of the sutures.

No better results have ever been obtained than by silver sutures, but on account of their stiffness they cause more pain; therefore I substitute the silkworm gut, which possesses the

FIG. 3.

principal advantages of silver wire and is not so unyielding. Kangaroo tendon is also a safe and useful suture.

The needles are a straight, flat, non-cutting needle about two inches in length, and a slightly curved Peaslee needle. The latter is provided with a carrying thread of No. 4 or 5 braided silk eighteen inches long. The former is used only for the short and superficial sutures, which are threaded directly into the needle.

In the majority of methods of operating for incomplete laceration, the first and frequently the second sutures are shorter and of far less importance than the third or fourth and fifth, as the case may be. But in my operation matters are reversed, for the first two sutures are the longest and most important.

Indeed, for want of a better term I often call them the *parent stitches* (Fig. 4, page 9).

The first assistant lifts up the flap by means of a tenaculum hooked into the edge at the centre (Fig. 3). Introducing two fingers of the left hand into the rectum to guard against wounding it, I start the needle at the distance of one-third to one-half of an inch back from the denuded surface, and, turning the point well toward the left buttock, and the handle correspondingly as far in the direction of the right buttock, I push it rather deeply into the tissue of the anterior ischio-rectal space, then upward and finally inward along the recto-vaginal wall until it has been carried just above the highest point of dissection in the centre, at which location, or as near to it as possible, the needle point is brought out. The needle is then introduced in the same manner in the opposite side, the upper end of the suture threaded into the loop, and the other half of the stitch carried to place.

For the second stitch the needle is started in about a third of an inch above the first, and its point directed at first outward in the same manner as in the introduction of the first suture. Not quite so much lateral tissue is taken up this time; that is, the needle does not make quite so wide a side sweep for the second suture, but passes more directly up along the recto-vaginal septum, and, when it has reached the upper third of its course, crosses the first suture and comes out on the vaginal mucous membrane about one-half or two-thirds of an inch above the central highest point of dissection. After drawing the first half of the suture into place the needle is introduced in the same manner on the opposite side for the second half of this stitch.

For the third stitch, a third of an inch above the second, the needle passes along the denuded surface till it reaches the line of junction of the septum and the flap, when it enters the latter at about its upper fourth, burrows across to the opposite side and down the denuded surface to the outside.

This stitch can sometimes be introduced in one continuous circuit, in other cases one half at a time.

The fourth and fifth stitches are buried under the denuded surface as far up as the junction of the septum and flap, where they pass under the flap, without burrowing in it, to the opposite side. With each of these sutures it is usually more convenient,

although not necessary, to put in one half and then introduce the needle on the opposite side in the same manner for the other half.

When the sutures are drawn up *en masse* the flap will emerge more or less from the introitus, and will frequently have the appearance of being much too long; the operator will consequently be tempted to pare off a quarter of an inch or more from the anterior edge, but this should not be done except in rare cases of great redundancy. This slack is disposed of by the gradual retraction of the flap during the process of healing and settling into normal relations. The sutures are now loosened again and the sixth stitch introduced, which is designed to purse up the anterior side of the flap and also bring together the last of the denuded surface. For this purpose the straight, thin needle previously mentioned is used. The needle is passed under the portion of denuded surface contiguous to the edge of the flap, and thence into and through the latter to the opposite side.

Care is required, in adjusting the first two long sutures, not to draw them too tightly, otherwise they will cut in a little, and, owing to their including so much tissue adjacent to the rectum, will be painful. The third, fourth, and fifth sutures can be drawn more tightly. The sixth, again, should be but moderately tight, as the pursed-up edge of the flap will not bear much restriction. Usually two or three superficial sutures of fine silk, horsehair, or small silkworm gut will be required to coapt any raw edges turned out by the puckering-up of the flap. These last are not absolutely essential, but they give a neat appearance to the operation, as well as dispose of surfaces for absorption or granulation. If silver wire has been used, the ends may be massed together and inserted into half an inch of small rubber tubing to prevent them from pricking the patient.

In any surgical work, but especially in the plastic operations of gynecology, it is extremely convenient and helpful to an operator if he is ambidextrous. However, but few possess this accomplishment to a full degree, and it is not really a *sine qua non* to skilful operating. Many expert operators do not.

In case there seems to be a tendency to persistent hemorrhage beneath the flap, I place as a compression stitch a strong silk suture, by means of a Peaslee needle, outside of the adjusted

sutures and over the flap, which I retain for about twenty-four hours and then remove (Fig. 5, *a*).

In this operation, or almost any other for perineorrhaphy, the long stitch or stitches which pass from the outside up to the highest point of dissection in the vagina should always be put in one half at a time. If the dissection is made even approximately as high as it should be, a slightly curved needle cannot make the whole circuit at once, except in a patient with lax tissues and a broad space between the tubera ischiorum. But even when it can be done it is accomplished at the expense of considerable strain on the parts operated upon and on the whole vaginal column.

I have constantly mentioned six as the number of sutures employed, but only because that is the number most commonly re-

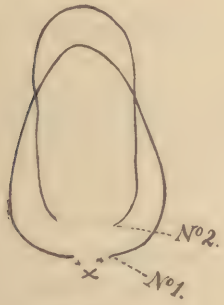

FIG. 4.

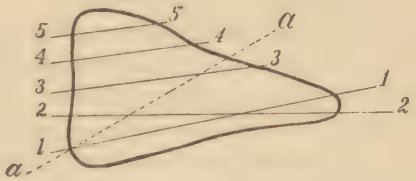

FIG. 5.

quired. Occasionally five are sufficient, and sometimes seven or eight are needed.

As there are no exposed raw surfaces either externally or internally, but little dressing of any kind, and but few vaginal douches, are demanded. Three or four are the usual number: one at the end of thirty-six hours, another on the fourth or fifth day, and another on the morning of the day the stitches are removed, usually the seventh. The external parts, on the other hand, require about the same attention as in other perineal operations. Night and morning, and each time after urinating, the soft parts adjacent to the line of union, and also the buttocks, are carefully separated and the wound and the surrounding parts gently irrigated with sterilized water or a 1:6000 solution of bichloride.

The bowels should be thoroughly evacuated, about the sixth

day after the operation, by a laxative, a saline and an oil enema, and the sutures removed about the seventh day. To insure solidity of the newly constructed parts I require the patient to lie in bed from two to three weeks.

The surgical procedure which I have described in this paper cannot commend itself on account of the consummate ease or rapidity with which it can be made. It is not as easily or quickly done as ordinary perineorrhaphy, nor even as the flap-splitting operation of which so much has been written of late. But after essaying different operations, from Baker Brown's to many of the present day, I have settled upon the method I have here briefly outlined as the best one I can make for the great majority of cases that present themselves to me for treatment.

In conclusion, there are a few points to which I wish to direct attention.

1. Any single mode of operating is not adapted to every case of laceration of the perineum.

2. All other qualifications being equal, that surgeon will be the most successful in this class of operations who, instead of following hard-and-fast rules, possesses a mechanical skill which he can adapt to the peculiarities of each individual case.

3. The subsequent comfort of patients is not facilitated by superabundance of cicatricial tissue within the vagina; therefore the anterior wall, instead of being subjected to any surgical procedure for redundancy, should be sustained by a restoration of the normal posterior wall.

4. The surgical operation here advocated has for its object a restoration of the torn posterior vaginal wall and perineum to their normal condition and functions, whereby there is afforded (*a*) support for the uterus to the full extent provided for in the vaginal walls; (*b*) support for the anterior vaginal wall and bladder; (*c*) support for the lower end of the rectum.